



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-5318; Directorate Identifier 2015-CE-035-AD]

RIN 2120-AA64

Airworthiness Directives; Quest Aircraft Design, LLC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Quest Aircraft Design, LLC Model KODIAK 100 airplanes. This proposed AD was prompted by a report of limited control yoke movement of the elevator control system due to cushion edging jammed in the elevator control anti-rotation guide slot. This proposed AD would require repetitively inspecting the elevator control system cushion edging for proper condition; replacing the cushion edging; and at a specified time terminating the repetitive inspections by installing wear pads on the elevator bearing assemblies. We are proposing this AD to correct the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; telephone: (208) 263-1111; toll free: (866) 263-1112; email: CustomerService@QuestAircraft.com; Internet: www.questaircraft.com. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5318; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: David Herron, Aerospace Engineer, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW, Renton, Washington 98057; phone: (425) 917-6469; fax: (425) 917-6591; email: david.herron@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-5318; Directorate Identifier 2015-CE-035-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all

comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received a report that, during a preflight inspection, an operator noted limited travel of the control yoke on a Quest Aircraft Design, LLC Model KODIAK 100 airplane. Upon further inspection of the control yoke system forward of the control yoke, cushion edging was found jammed in the elevator control anti-rotation guide slot. The jammed edging prevented the control yoke from having full nose up and nose down travel. The operator also reported the same problem on a different KODIAK 100 airplane in which the cushion edging plastic portion separated from the metal track.

Investigation revealed that over time the cushion edging may become worn and degrade. This condition, if not corrected, could result in failure of the elevator control system cushion edging, which could restrict elevator control yoke movement and cause loss of control.

Relevant Service Information

We reviewed Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014; Quest Aircraft Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated; Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015; and Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated. The service information describes procedures for repetitively inspecting the cushion edging installed on the elevator control

anti-rotation guide for proper condition, wear, and security, and replacing if necessary; and removing the cushion edging and installing wear pads on the pilot and co-pilot arms of the elevator bearing assemblies as a terminating action to the repetitive inspections of the cushion edging. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously.

Costs of Compliance

We estimate that this proposed AD affects 60 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect the cushion edging on each side of the elevator control anti-rotation guide slot	.5 work-hour X \$85 per hour = \$42.50 per inspection	Not applicable	\$42.50 per inspection	\$2,550 per inspection
Required terminating action for repetitive inspections – replace cushion edging with wear pads	3 work-hours X \$85 per hour = \$255	\$200	\$455	\$27,300

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need this replacement:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replace cushion edging	1 work-hour X \$85 per hour = \$85	\$20	\$105

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Quest Aircraft Design, LLC: Docket No. FAA-2015-5318; Directorate Identifier 2015-CE-035-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Quest Aircraft Design, LLC Model KODIAK 100 airplanes, all serial numbers 100-0001 through 100-0149, that are certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2730; Elevator Control System.

(e) Unsafe Condition

This AD was prompted by a report of limited control yoke movement due to cushion edging jammed in the elevator control anti-rotation guide slot. We are issuing this AD to prevent failure of the elevator control system, which could result in loss of control.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspect Cushion Edging

Before further flight after the effective date of this AD and repetitively thereafter at intervals not to exceed 50 hours time-in-service or at every annual inspection, whichever comes first, until the terminating action specified in paragraph (i) of this AD is done, inspect the cushion edging, part number (P/N) M22529/2-3R-25, located on each

side of the elevator control anti-rotation guide slot, P/N 100-619-0008, for the pilot and co-pilot control yoke assemblies, following section 5.1 Cushion Edging Inspection of Quest Aircraft Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated, as specified in Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014.

(h) Replace Cushion Edging

If damage or wear is found during any inspection required in paragraph (g) of this AD, before further flight, replace the cushion edging following section 5.3 of Quest Aircraft Field Service Instruction, Elevator Control System – Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated, as specified in Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014.

(i) Install Wear Pads (Terminating Action for the Repetitive Inspections)

Within 1 year after the effective date of this AD, remove the cushion edging, P/N M22529/2-3R-25, installed on the elevator control anti-rotation guide, and install wear pads, P/N 100-619-0037, on the elevator bearing assembly link arm following section 5. Instructions, including all subsections, of Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated, as specified in Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015. Installing all four wear pads on the pilot and co-pilot arms of the elevator bearing assemblies terminates the repetitive inspections required in paragraph (g) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information

directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact David Herron, Aerospace Engineer, Seattle ACO, FAA, 1601 Lind Avenue SW, Renton, Washington 98057; phone: (425) 917-6469; fax: (425) 917-6591; email: david.herron@faa.gov.

(2) For service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; telephone: (208) 263-1111; toll free: (866) 263-1112; email: CustomerService@QuestAircraft.com; Internet: www.questaircraft.com. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on October 30, 2015.

Melvin Johnson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-28198 Filed: 11/4/2015 8:45 am; Publication Date: 11/5/2015]